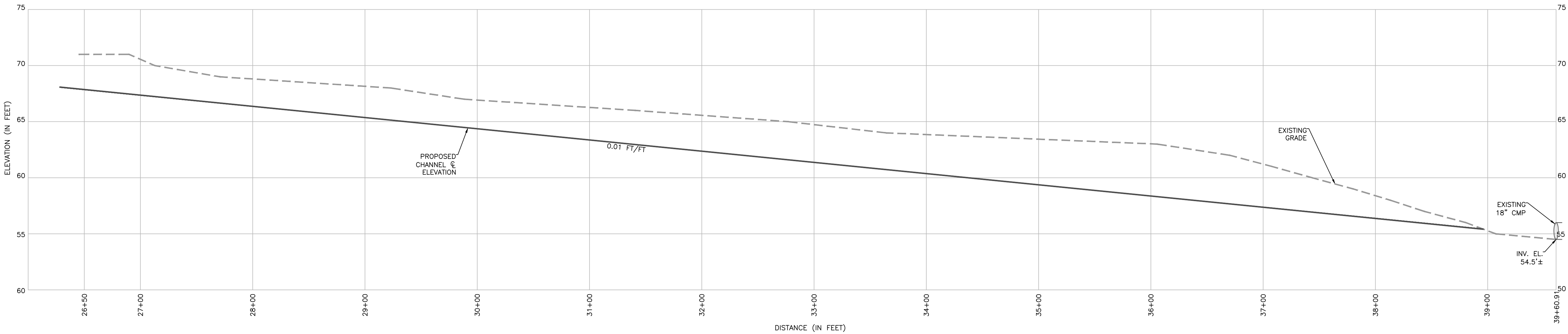


PERIMETER CHANNEL
PLAN VIEW - NORTH SIDE
SCALE: 1"=50'



PERIMETER CHANNEL
PROFILE - NORTH SIDE
SCALE: HORIZ 1"=50'
VERT 1"=5'

Perimeter Channel Dimensions - North Side						
Channel	Station	Bottom Width (ft) B	Side Slope Z	Channel Depth (ft) D	Bed Slope (ft/ft)	Lining
CP-1B	26+36 - 32+30	4	2:1	2.25	0.01	R-4 Riprap
CP-1C	32+30 - 38+00	4	2:1	2.25	0.01	R-4 Riprap

LEGEND

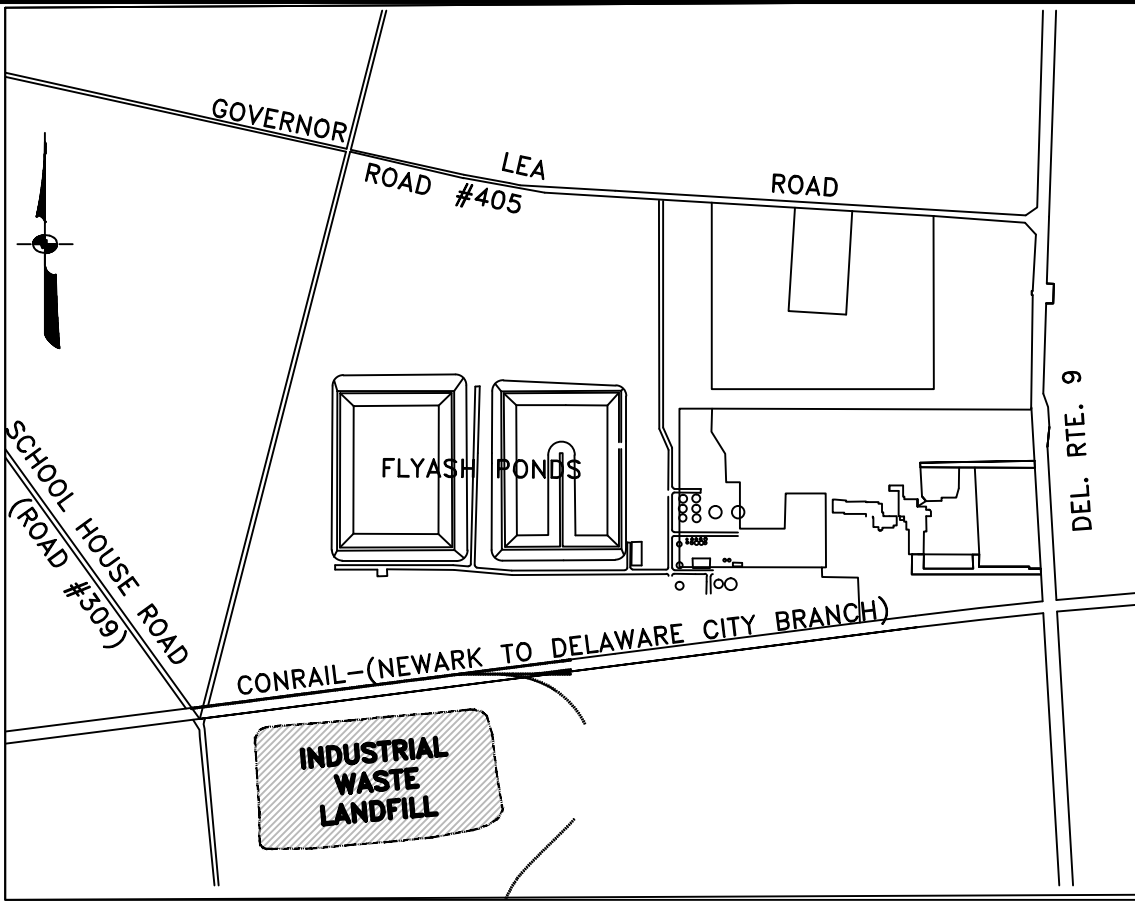
- EXISTING SPOT ELEVATION
- EXISTING EDGE OF TREES
- EXISTING FENCE
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- EXISTING PROPERTY LINE
- EXISTING INTERIOR PARCEL LINE
- EXISTING EDGE OF HEAVY FOLIAGE
- EXISTING ABOVE-GROUND ELECTRIC LINE ALIGNMENT
- EXISTING POLE SUPPORTING ELECTRIC LINE
- EXISTING RAILROAD
- EXISTING STORMWATER CULVERT
- LIMIT OF LANDFILL LINER SYSTEM (APPROX. BOUNDARY OF LANDFILL)
- EXISTING UNPAVED ACCESS ROAD
- EXISTING PERIMETER DRAINAGE CHANNEL & FLOW DIRECTION
- PROPOSED FINAL GRADE (MINOR CONTOUR)
- PROPOSED FINAL GRADE (MAJOR CONTOUR)

NOTES

- INFORMATION SHOWN HEREON REGARDING EXISTING FEATURES, GROUND TOPOGRAPHY AND PROPERTY/EASEMENT LINES BASED ON A GROUND SURVEY COMPLETED IN APRIL 2005 AND UPDATED THROUGH FEBRUARY 2007 BY VANDEMARK & LYNCH, INC., 4305 MILLER RD., PO BOX 2047, WILMINGTON, DE 19899, (302) 764-7635. SURVEY CONTROLS ARE AS FOLLOWS:

HORIZONTAL DATUM: PREMCOR DELAWARE CITY PLANT
VERTICAL DATUM: NATIONAL GEODETIC VERTICAL DATUM 1929

BENCHMARK: PLANT CONTROL MONUMENT #208 LOCATED APPROXIMATELY 70' WEST OF WEST 6TH STREET AT THE CENTERLINE OF Q STREET EXTENDED AND 43.2' SOUTH OF A CHAIN LINK FENCE. ELEVATION = 65.35'
- ALL WORK SHALL BE PERFORMED AND COMPLETED TO SATISFY THE REQUIREMENTS OF THE DNREC IWL OPERATING PERMIT, DATED FEBRUARY 26, 2004.
- CONTRACTOR SHALL SECURE ALL PERMITS REQUIRED BY VALERO, MOTIVA AND DNREC TO PERFORM THE WORK PRIOR TO COMMENCEMENT OF WORK.
- THE PROPOSED CHANNEL CENTERLINE ELEVATION REPRESENTS THE TOP OF LINING ELEVATION.
- SIZES, MATERIALS, AND FINAL GRADES OF CHANNEL CULVERTS WILL BE FINALIZED WITH CONSTRUCTION LEVEL DRAWINGS.
- SEE SHEETS C-50 THROUGH C-52 FOR CROSS-SECTIONS.



VICINITY MAP
NOT TO SCALE

Sheet 15 of 2005 - 17463-14
DWG Name: C:\30240421-Holmes_RL\Working_Dwg\30240421-Per Plan Profile.dwg
Updated By: smhbw02

REVISIONS				
NO.	BY	CHKD	DATE	DESCRIPTION
1	SMS	JAC	10/30/07	REVISED TO ADDRESS DNREC COMMENTS
2	SMS	JAC	02/02/08	SUBMITTED WITH CLOSURE PLAN FOR DNREC REVIEW

WARNINGS

0 0.5 1.0

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

IF THE SEAL ON THIS PLAN IS NOT RED OR RAISED THEN THIS PLAN MAY HAVE BEEN ALTERED AND RECOPIED. ORIGINAL SEALS ARE STAMPED IN RED INK OR EMBOSSED WITH A CRIMPING SEAL.

PLANS ISSUED BY:

URS

335 COMMERCE DRIVE, STE 300
FORT WASHINGTON, PA 19034
TEL: (215) 367-2500
FAX: (215) 367-1000

DESIGNED BY: NBL 10/13/05
DRAWN BY: SMS 02/02/08
CHECKED BY: JAC 10/30/07
APPROVED BY: JAC 10/30/07
CLIENT APPROVED BY:

DELAWARE CITY REFINERY
INDUSTRIAL WASTE LANDFILL CLOSURE

PERIMETER CHANNEL PLAN & PROFILE
NORTH SIDE (SHEET 4 OF 4)

JOB NO. 20240421
SCALE: AS SHOWN
ORIGINAL DATE: 09/16/05
LAST REVISED: 10/30/07
REV 1

C-43